



Vermont Telecommunications Authority

TO: House Committee on Commerce and Economic Development
House Committee on Corrections and Institutions
Senate Committee on Economic Development, Housing and General Affairs
Senate Committee on Finance
Senate Committee on Institutions
Joint Fiscal Committee
Secretary of the Administration
Secretary of the Agency of Commerce and Community Development (Challenge Lead)
Chief, Connect Vermont

FROM: Vermont Telecommunications Authority

DATE: April 3, 2012

RE: Quarterly Report per Section 49(i) of the FY2012 Capital Bill

Per Section 49(i) of the FY2012 Capital Bill starting on October 1, 2011 the Vermont Telecommunication Authority (VTA) is to submit a report on investments made or grants awarded that are in furtherance of the goals stated in 30 V.S.A. § 8060(b) using the telecommunications measures established pursuant to No. 146 of the Acts of the 2009 Adj. Sess. (2010) (an act relating to implementation of challenges for change) to track the progress made in attaining those goals through such investments and grants. The progress report provided below reflects the outcomes and measures applied under Outcome 2, Measures 2, of the Economic Development Challenge (see Challenges for Change, Quarterly Progress Report, p. 97-98, July 2011) to projects funded under Section 49 and location-specific information on the progress of deployment of telecommunications technology that does not require the utilization of towers:

- (i) Percentage of residences and businesses with broadband access, using the current Vermont definition of broadband
- (ii) Percentage of cellular coverage on major roads
- (iii) Percentage of cellular coverage on minor roads
- (iv) Percent of State where public safety radios work

Measure 2(i): Progress made in attaining broadband telecommunications goals.

Summary: Statutorily-required Public Comment Period completed.

Statutorily-required Competitive Solicitation in process.

The standard used to measure broadband coverage is currently identified as areas with at least 768kbps download and 200kbps upload speeds. This includes cable, DSL, fiber optic and wireless broadband (fixed and mobile). Satellite-based coverage is not included.

The goal is to estimate the change in statewide broadband availability at the address-level (Measure 2(i)). To estimate the availability of broadband at the address level the Vermont Broadband Mapping Initiative¹ utilizes broadband coverage maps to estimate the percentage of buildings with coverage based on E911 addresses. The coverage areas are drawn from data provided by broadband providers as of December 31, 2010 and the accuracy and/or margin of error is not known. From these maps it is estimated that 94.6% of Vermont buildings fall within areas identified as having broadband coverage. Updated coverage estimates as of June 30, 2011 are now expected to become available in the second quarter of 2012.

Prior to awarding grants to expand broadband service and prior to the construction or installation of VTA-owned fiber optic facilities, Section 49 of the Fiscal Year 2012 Capital Bill required the VTA to issue a Request for Public Comment. Previously, the VTA identified both a proposed schedule, parameters for a broadband grant program and a potential set of multiple-use fiber optic facilities to be constructed using state capital appropriations. With this information the VTA issued a Request for Public Comments. (See www.telecomvt.org/broadbandcomments2011.)

After review of the comments received, the VTA issued a Broadband Notice of Grant Funding Availability on March 13, 2012. (See <http://www.telecomvt.org/rfp/128>.) Under this Notice, up to \$3.6 million in grant funding from the 2012 Capital Appropriation is available for projects to expand broadband to unserved locations in Target Communities. The Target Communities have been defined by the Agency of Administration, based on Broadband Mapping Initiative data current through June 30, 2011, and on the forward-looking service areas of already funded, but not yet completed, broadband expansion projects. The VTA will strive to make the first awards to proposals submitted under this Notice in the second quarter of 2012. This timeline will depend on the number and complexity of proposals received. However, the VTA is looking to complete the awards process in the third quarter of 2012.

¹ The Vermont Broadband Mapping Initiative is a collaborative effort of the Vermont Center for Geographic Information (VCGI), the Vermont Department of Public Service (DPS), the UVM Center for Rural Studies and the Vermont Telecommunications Authority (VTA), funded by a grant from the U.S. Dept. of Commerce.

Measure 2(ii) and 2(iii): Progress made in attaining mobile telecommunications goals.

Summary: Statutorily-required Public Comment Period Completed.

Statutorily-required Competitive Solicitation completed.

Contracts with mobile service providers in negotiation.

Based on 2010 drive-test data collected through the Vermont Broadband Mapping Initiative, the VTA has estimated that 87% of major roads and 76% of minor roads have mobile telecommunications coverage ("roads" are defined as roads that are part of the federal aid highway system, not city streets or residential neighborhoods). Coverage of both major air interfaces for cellular phones, GSM (used by AT&T and T-Mobile) and CDMA (used by Verizon Wireless, Sprint, and US Cellular) was examined. The reported numbers reflect the coverage for GSM phones, which was more extensive (the CDMA estimate is 55% of major roads and 44% of minor roads). It should be noted that these relatively high coverage percentages do not reflect low coverage or gaps in coverage that can result in dropped calls or inadequate signal transmission.

As part of its duties under 3 V.S.A. § 2222b (b) (1), the Agency of Administration is charged with developing an inventory of locations at which mobile telecommunications and broadband services are not available within the state. The VTA understands that, as part of that initiative, the Agency plans to commission a new independent and comprehensive evaluation of mobile voice and data coverage in 2013. The VTA will report on cellular coverage utilizing the data that becomes available at that time.

Section 49 of the Fiscal Year 2012 Capital Bill required a competitive solicitation, as well as a Request for Public Comment to enlist the cell-phone user experience of Vermont residents. The Request for Public Comment had been completed previously and results posted on the VTA's web site (see <http://www.telecomvt.org/resources/public-comments/2011-A01.php>). The competitive solicitation process has also been completed. The VTA has announced its intention to negotiate contracts for expansion of cellular service with VTel Wireless, an affiliate of Springfield, VT, based Vermont Telephone, and Vanu CoverageCo, a Cambridge, MA, based affiliate of Vanu, Inc., a developer of software-defined radio equipment which supports the deployment of multiple standards used by cellular operators on a single platform. Vanu CoverageCo seeks to provide wholesale service to multiple cellular carriers that allow those carriers to expand cellular service to their customers. With Vanu CoverageCo, the VTA is seeking to fund a deployment consisting of micro-cell equipment along unserved Target Corridors, mounted on utility pole tops or other available existing structures. VTel Wireless

seeks to add support for 2G/3G cellular voice and data services to its planned Wireless Open World (WOW) network, a 4G LTE mobile data network. VTel is also seeking to provide a new retail cellular offer to residents and businesses in the state.

Negotiations with both VTel and Vanu CoverageCo have been ongoing in the first quarter of 2012, and are currently ongoing. These negotiations have been complicated and lengthened by the need for both companies to engage in parallel negotiations with third parties in order to reach final agreement with the VTA. The VTA currently anticipates contract negotiations will be concluded in the second quarter of 2012 and a deployment schedule established based on those contracts.

Additional information under Section 49(i): Deployment of telecommunications technology that does not require utilization of towers, including location-specific information.

Summary: Contract with non-tower-based cellular service provider in negotiation.

In March 2011, the VTA issued a Request for Information (RFI) on the subject of Small-Scale Rural Wireless Infrastructure Development. Based, in part, on responses to this RFI, the VTA issued a RFP on the topic of Providing Cellular Service in Unserved Vermont Communities, in which the VTA seeks proposals for grants or direct investment in cellular infrastructure to expand cellular service in Vermont using its FY2012 capital appropriation. The RFP requested proposals from alternative infrastructure providers, which could include a number of forms of non-tower-based cellular infrastructure. From this RFP the VTA has selected a respondent with whom it is in contract negotiations for non-tower-based infrastructure (Vanu CoverageCo). The contract is for the deployment of micro-cell equipment along designated unserved Target Corridors. The micro-cell equipment would be mounted on utility pole tops or other available existing structures.

Measure 2(iv): Percentage of State where public safety radios work.

Summary: Co-development and co-location opportunities being pursued as available.

While the VTA is not charged with expanding service territories for public service radios, there has been significant collaboration with the Department of Public Safety in the utilization of State lands at proposed communication facility sites. At lands owned or controlled by the Agency of Natural Resources on Okemo Mountain, in Mount Holly, utilizing the area and access routes developed by Okemo Mountain Resort, the VTA has negotiated a license agreement that will provide for consolidation of equipment on a tower that may be constructed in the future by the Department of Public Safety for public safety radio transmission. In addition, the licensee, in its construction of a facility, is required to accommodate municipal public safety users such as first responders. The collocation of users and consolidation of equipment not only provides

for efficient use of State lands but expands public safety radio coverage and reserves the opportunity of the Department of Public Safety for future safety radio deployment. The license was in the final stages of approval by the designee of the Secretary of Administration in accordance with 30 VSA §227e at the end of the first quarter of 2012.